EPA Climate Change and Water News November 7, 2013

EPA Climate Change and Water News is a bi-weekly newsletter from the U.S. Environmental Protection Agency (EPA) Office of Water that features news and information about EPA and other federal agencies related to climate change and water. Partner activities, as well as related events and publications, are also included.

To learn more about climate change impacts on water resources, visit our website at: http://www.epa.gov/water/climatechange.

For training, conferences, webinars, and other events, visit: http://water.epa.gov/scitech/climatechange/Calendar-of-Events.cfm.

U.S. EPA News

- <u>Draft EPA Office of Water Climate Change Adaptation Implementation Plan Released for Public</u> Review and Comment
- EPA Releases Report on Importance of Water to Economy

Other U.S. Federal Agency News

- President Issues Executive Order on Preparing for Climate Change and Creates Task Force
- Bureau of Reclamation Releases Climate Change Literature Synthesis Report
- NOAA and Sea Grant Release Report on Cost-Efficient Climate Adaptation Best Practices in North Atlantic Communities

Other News

- <u>Columbia University's Center for Climate Change Law Publishes Handbook on Legal Tools to</u>
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- American Meteorological Society Journal Releases Study on Climate Change Sensitivity
 Assessment and Adaptation Planning for Public Water Supply

U.S. EPA News

Draft EPA Office of Water Climate Change Adaptation Implementation Plan Released for Public Review and Comment

EPA has released its draft Climate Change Adaptation Implementation Plans for public review and comment, including that of the Office of Water. The Implementation Plans provide detailed information about the actions EPA plans to take to help communities adapt to a changing climate. The impacts of a changing climate, including increased extreme weather, floods, and droughts, affect EPA's work to protect clean air and water. The Draft EPA Climate Change Adaptation Implementation Plans recognize that EPA must integrate climate adaptation planning into its programs, policies, rules, and operations to ensure that the Agency's work continues to be effective even as the climate changes. The Office of Water's Plan provides an overview of the opportunities available within the EPA to respond to the challenges that a changing climate poses to protect the quality of national water resources and drinking water. The public comment period closes on January 3, 2014. For more information, visit: http://epa.gov/climatechange/impacts-adaptation/fed-programs/EPA-impl-plans.html.

EPA Releases Report on Importance of Water to Economy

EPA has released a report on the Importance of Water to the U.S. Economy. This report is intended to help raise the awareness of water's importance to our national economic welfare and to summarize information that public and private decision-makers can use to better manage the nation's water resources. It highlights EPA's review of the literature and practice on the importance of water to the U.S. economy, identifies key data gaps, and describes the implication of the study's findings for future research. EPA hopes this report will be a catalyst for a broader discussion about water's critical role in the U.S. economy. To view the report, visit: http://water.epa.gov/action/importanceofwater/index.cfm.

Other Federal Agency News

President Issues Executive Order on Preparing for Climate Change and Creates Task Force

President Obama has signed an Executive Order on Preparing the United States for the Impacts of Climate Change, directing federal agencies to take a series of steps to make it easier for American communities to strengthen their resilience to extreme weather and prepare for other impacts of climate change. The Executive Order addresses modernizing federal programs to support climate-resilient investments; managing lands and waters for climate preparedness and resilience; providing information, data, and tools; and, planning for climate change related risk. Also established is a Task Force on Climate Preparedness and Resilience, comprised of state, local and tribal leaders from across the country that will use their first-hand experiences in building climate preparedness and resilience in their communities to inform their recommendations to the Administration. To view a fact sheet, visit: http://www.whitehouse.gov/the-press-office/2013/11/01/fact-sheet-executive-order-climate-preparedness. To view the Executive Order, visit: http://www.whitehouse.gov/the-press-office/2013/11/01/executive-order-preparing-united-states-impacts-climate-change.

Bureau of Reclamation Releases Climate Change Literature Synthesis Report

The third edition Literature Synthesis on Climate Change Implications for Water and Environmental Resources from the Bureau of Reclamation offers a summary of recent literature on the current and projected effects of climate change on hydrology and water resources. It is organized around the five Reclamation regions which correspond roughly with the Columbia River basin, the Sacramento-San Joaquin River basin, the upper Colorado River basin, the lower Colorado River basin, and the Great Plains. The report was externally reviewed by staff from the five NOAA Regional Integrated Sciences and Assessments centers located in the western United States. The information in this report is meant for use in a range of planning studies including environmental impact statements, biological assessments, and feasibility studies. Previous versions were published in 2011 and 2009. To learn more, visit: http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=45024.

NOAA and Sea Grant Release Report on Cost-Efficient Climate Adaptation Best Practices in North Atlantic Communities

Undertaken to raise awareness of best practices in leading North Atlantic communities, this project was sponsored by the National Oceanic and Atmospheric Administration North Atlantic Regional Team and Sea Grant. The report, "Cost-Efficient Climate Change Adaptation in the North Atlantic," looks at community-level coastal flood management and climate change adaptation from Virginia to Maine. The authors identified low-cost, innovative ways that coastal communities are addressing climate change and related coastal hazard management best practices at the local level by looking at studies, laws, policies, outreach tools, and infrastructure investments that were voluntarily adopted by 34 local municipalities. For more information and to view the report, visit: http://seagrant.uconn.edu/CEANA/.

Other News

Columbia University's Center for Climate Change Law Publishes Handbook on Legal Tools to Limit Risks of Climate Change for Coastal Communities

Columbia University's Center for Climate Change Law has published "Managed Coastal Retreat: A Legal Handbook on Shifting Development Away from Vulnerable Areas," which examines the legal tools available to state and local governments to discourage or prevent development or redevelopment along risky coasts and other areas susceptible to natural hazards. Managed retreat - the planned process of moving development away from vulnerable areas - is a controversial concept as many homeowners would prefer to rebuild after a destructive storm and take their chances. More frequent and intense storms are projected in the coming decades however, and massive public spending for construction that may be washed away is not always the best path. The handbook describes legal principles and precedents that can serve as useful guides for new policies. It also examines case studies and lessons learned and makes recommendations based on the experiences of states and municipalities that have faced destructive storms and other natural hazards and implemented managed retreat to protect against future disasters. To learn more about the handbook, visit:

http://www.law.columbia.edu/media_inquiries/news_events/2013/october2013/managed-retreat-handbook.

American Meteorological Society Journal Releases Study on Climate Change Sensitivity Assessment and Adaptation Planning for Public Water Supply

A new study in Volume 17, Issue 23 (October 2013) of the journal Earth Interactions, assesses climate change risk to municipal water supplies. Water supply risk is often conducted by hydrologic modeling specific to local watersheds and infrastructure to ensure that outputs are compatible with existing planning frameworks and processes. This study leverages the modeling capacity of an operational National Weather Service River Forecast Center to explore the potential impacts of future climate-driven hydrologic changes on factors important to planning at the Salt Lake City Department of Public Utilities. Hydrologic modeling results for the study area show that temperature changes alone will lead to earlier runoff and reduced runoff volume. In addition, the largest flow reductions occur during the high water demand months of May–September. This study explores the consequences of climate change for the reliability of Salt Lake City's water supply system using scenarios that include hydrologic changes in average conditions, severe drought scenarios, and future water demand test cases. To learn more, visit: http://journals.ametsoc.org/doi/abs/10.1175/2012El000501.1.